The Effectiveness of Internet Support Groups in the Management of Anxiety

Thesis

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Abstract

Anxiety disorders are among the most common of mental illnesses, affecting 18% of the US population in a given year, yet only about one-third of those afflicted with such disorders will seek professional help. For those that choose to avoid formal mental health services, the internet may prove to be a valuable alternative resource. Along with using the internet to find information regarding mental health, individuals are increasingly utilizing online mental health services such as online counseling and internet support groups (ISGs). Research on the efficacy of online counseling for the treatment of anxiety disorders has been promising, but similar research on ISGs for symptoms of anxiety and anxiety disorders is limited. In the current study, the researcher evaluates the effectiveness of internet support groups in the management of anxiety disorders. Participants from ISG and face-to-face support groups were surveyed online and asked a series of demographical questions as well as questions pertaining to the perceived presence of Yalom's therapeutic factors. Using descriptive statistics and Kruskal-Wallis ANOVA with an alpha level .05, the researcher found that the groups were statistically similar across several demographic variables as well as regarding the perceived presence of therapeutic factors. Given these analyses, social work professionals should consider referring clients with anxiety to ISGs as a lower-cost and more convenient adjunct or alternative to f2f support groups.

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Dedication

I dedicate this thesis to my parents, Michelle and David Deis. Without their love, support and cultivation of intellectual curiosity, this research project would not have been possible.

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Chapter 1: Statement of Research Topic

Introduction

Anxiety disorders are among the most common of mental illnesses, affecting 18% of the US population in a given year, yet only one-third of those afflicted with such disorders will seek professional help (Kessler, Chiu, Demler & Walters, 2005). Common barriers to professional treatment include the high cost of services, appointment wait times, fear of embarrassment or judgment, and the patient's belief that he or she cannot be helped (Chartier-Otis, Perreault & Belanger, 2010).

In recent years, individuals with mental health issues have increasingly turned to the internet for mental health information. Along with this, some individuals are also choosing to partake in nontraditional mental health services over the internet, such as online counseling and internet support groups (ISGs). These alternative resources offer several advantages over traditional mental health services, including greater anonymity, lower cost, increased convenience, and reduced transportation time (Rummell & Joyce, 2010). However, online mental health services may also have some limits; in particular, participants could be apprehensive about the lack of body language and nonverbal cues when interacting online (Haberstroh et al, 2007).

The majority of research regarding online treatment for mental health concerns has focused on therapist-guided online counseling. Although findings regarding online counseling have been promising (Barak, Hen & Boniel-Nissin, 2008), very little similar research has extended to assessing ISGs in junction with mental health issues. Most research conducted on the effectiveness of ISGs has related to physical health issues. Several studies suggest that introducing internet-based support to cancer survivors could result in positive outcomes

regarding social support, competence in finding information (Gustafson et al, 2001), depression (Winzelberg et al, 2003) and self-perceived health status (Owen et al, 2005).

Purpose of the Study

This study seeks to look at the utility of ISGs in managing symptoms of anxiety and/or anxiety disorders, possible demographic differences between users of ISG and f2f participants, and potential barriers to professional mental health treatment that some ISG members might experience.

Research Questions

1. Are there characteristics that are related to an individual choosing to utilize an ISG over a f2f support group?
2. What barriers to formal treatment are identified by participants of internet support groups?
3. Do members of ISGs report that such groups are an effective tool?
4. How does participant time in group correlate with perceived usefulness?
5. What therapeutic factors are present in ISGs and f2f groups? Are there differences in such factors between the different modalities?

Chapter 2: Literature Review

Help-Seeking Among Anxiety Sufferers

Anxiety disorders are among the most common mental disorders experienced by Americans. Although there is a 12-month prevalence rate of 18.1% among the U.S. adult population, only about one-third (36%) of individuals with an anxiety disorder will receive formal treatment (Kessler, Chiu, Demler & Walters, 2005). Additionally, whereas approximately 40% of individuals with mood disorders seek treatment within a year after onset, nearly all of anxiety disorders are associated with average delays in treatment- seeking that surpass ten years (Wang, Berglund, Olfson, Pincus, Wells & Kessler, 2005). Barriers to treatment among individuals with anxiety disorders may be psychological, social, or economic. In one study, participants suffering from social anxiety and panic disorder most frequently reported cost of services and not knowing where to find help as barriers to treatment; other barriers to treatment reported among individuals with anxiety disorders included lack of health insurance coverage, appointment wait times, the patient's belief that he or she cannot be helped, embarrassment about talking about personal problems, and worry about what others might think (Chartier-Otis, Perreault & Belanger, 2010). Additionally, Coleman and Coles (2010) found that deficits in an individual's ability to recognize that he or she has an anxiety disorder may contribute to low levels of help-seeking.

Mental Health and the Internet

For individuals that avoid traditional mental health services, the internet may prove to be a valuable alternative resource. It has been estimated that as many as 21% of US citizens have accessed online information about depression, anxiety, stress or mental health issues (Fox, 2009).

Of persons surveyed in 2000 by the Pew Internet & American Life Project, 41% said that the internet affected their decisions about going to a doctor or treating an illness. Furthermore, a Harris online poll found that those who use the internet to guide their health decisions are more likely to ask more specific questions of their doctors (Harris Interactive, 2001). Along with using the internet to find information, individuals are increasingly seeking nontraditional, online mental health services such as online counseling and internet support groups (ISGs). These alternative services offer several advantages, including greater convenience, lower costs, reduced transportation time, anonymity, and reduced exposure to stigma (Rummell & Joyce, 2010). Thus, the internet shifts power from the doctor to the patient, creating a more equal relationship.

The majority of research regarding online treatment for mental health concerns has focused on therapist-guided online counseling. Online counseling refers to the provision of mental health services to a client over the internet through a variety of means, including e-mail, a private instant message chat service, chat rooms, or videoconferencing (Elleven & Allen, 2004). Online counseling has demonstrated effectiveness in treating several mental disorders, and meta-analyses demonstrate results similar to those of traditional face to face therapies (f2f), although effect sizes vary across disorders. For example, effect sizes of .80 have been found for PTSD and panic disorders and of .17 for behavioral issues such as weight loss (Barak, Hen & Boniel-Nissin, 2008). Additionally, online counseling clients find that the service reduces the social stigma related to seeking help, is more convenient than traditional services, and allows more time for deeper reflection (Haberstroh, Duffey, Evans, Gee, & Trepal, 2007). Furthermore, two studies (Cook & Doyle, 2002; Prado & Meyer, 2004) compared participants in online counseling and f2f and found that the online relationship between therapist and client can be as strong as that of a f2f therapeutic relationship.

Research on the efficacy of online counseling for the treatment of anxiety disorders is promising, resulting in effect sizes as high as 0.80 (Barak, Hen & Boniel-Nissin, 2008). Despite these findings, research on ISGs for symptoms of anxiety and anxiety disorders is limited. Nonetheless, ISGs may prove to be an especially valuable asset to individuals with symptoms and/or an anxiety disorder. Those managing a social anxiety disorder could benefit from an ISG because of the increased accessibility, anonymity and ease of self-disclosure. Researchers have noted that people say and do things on the internet that they wouldn't ordinarily do and say face to face. Indeed, Ferriter (1993) found that pre-clinical psychiatric interviews conducted using computers compared to face to face yielded more honest answers. This phenomenon has been coined "the online disinhibition effect." At least six factors are involved in causing this disinhibition, including dissociative anonymity, solipsistic introjection, minimization of status and authority, asynchronicity, and dissociative imagination (Suler, 2004).

Benefits of Support Groups

Research has demonstrated that f2f support groups are effective in helping people cope with a mental illness. Members of f2f support groups demonstrate improved coping skills, greater acceptance of their illness, improved medication adherence, decreased levels of worry, higher satisfaction with their health, improved daily functioning and improved illness management (Solomon, 2004). Additionally, when members rate the effectiveness of their support groups, the average rating given is 4.3 out of 5 on a Likert scale **(**Knight, Wollert, Levy, Frame & Padgett, 1980). William, Marks & Schafer (1993) reported that members of an OCD support group rated the group as 3.8 on a 0 (poor) to 4 (excellent) scale across several areas of focus. Galanter's (1988) study of the organization Recovery, Inc. found improved psychiatric

symptoms, increased coping skills, and increased life satisfaction among participants, especially if members had been active in the group for over two years.

Irvin Yalom (1995) identified eleven therapeutic factors that he believed were necessary to initiate the processes of change and recovery among supper group participants. The therapeutic factors are as follows: universality, altruism, instillation of hope, imparting of information, development of social skills, interpersonal learning, cohesion, existential factors, catharsis, imitative behavior, and corrective recapitulation of family of origin issues. Group members may rank therapeutic factors differently based on their characteristics, culture, age and background; for example, Morgan & Ferrell (1999) found that perceived interpersonal learning, universality, and imparting information were the most present factors within a group of incarcerated males but a group of older women ranked perceived existential awareness as the most present factor (McLeod & Ryan, 1993).

Internet Support Groups

An internet support group (ISG) is an online community that contains an organized collective of individuals who post messages, questions, and responses related to a common issue that all members struggle with. Maloney-Krichmar and Preece (2005) define online communities as "group(s) of people with a *common interest* or a *shared purpose* whose interactions are governed by *policies* in the form of tacit assumptions, rituals, protocols, rules, and laws and who use computer *systems* to support and mediate social interaction and facilitate a sense of togetherness." ISGs are similar to traditional face to face (f2f) support groups in that it's an attempt by people with mutual needs to gain control over circumstances that affect their lives. The majority of support groups, regardless of modality, are based on principles of empowerment,

inclusion, nonhierarchical decision making, and shared responsibility. The values of these groups include cooperative self-organization, non-bureaucratic mutual helping methods, social support, and free services (Joinson, 2001; Segal, Silverman, & Temkin, 1993).

Most of the current research regarding ISGs concentrates on communities for those suffering from physical and debilitating illness. In regard to managing the psychosocial aspects of illnesses, research has been promising. Several studies suggest that introducing internet-based support to cancer survivors could result in positive outcomes regarding social support, competence in finding information (Gustafson et al, 2001), depression (Winzelberg et al, 2003) and self-perceived health status (Owen et al, 2005). In addition, Rodgers & Chen (2005) noted several benefits of participation in breast cancer ISGs, including knowledge exchange, social support, more positive attitude toward breast cancer, increased coping skills, and improved mood. Additionally, the longer the women belonged to the ISG and the more they participated, the more the content of their posts indicated positive well-being. Information and support tend to be the backbone of such groups. A content analysis study of a cancer ISG found that 80% of posts contained information-giving or seeking, encouragement, or personal experiences, while the remaining 20% contained thanks, humor, or prayers (Klemm, Reppert, & Visich, 1998).

On the other hand, research on mental health ISGs is limited and is particularly focused on those managing depressive symptoms. In one study, Griffiths et al. (2012) found that volunteers with depressive symptoms exposed to an ISG over a 12-month period showed significant reduction in depressive symptoms. In another study, almost the entire sample participating in ISGs for depression peer support reported that interacting with these groups helped their symptoms, and over one-third preferred communicating with others on the ISG to f2f counseling. Evidence suggests that strong relationships between peers can be developed

through computer-mediated conversation. Parks and Roberts (1998) conducted a study of relationship development in online virtual environments called MOOs (Multi-User Dimensions, Object Oriented). They found that 93.6% of their sample had formed ongoing personal relationships that they identified as close friendships, friendships, or romantic relationships. Furthermore, some participants noted that online discussions had prompted them to be more open with health care provider, indicating that ISGs may be useful as a supplement to f2f care in depression support (Houston, Cooper, & Ford, 2002).

Writing out problems on a medium such as postings on an ISG can be therapeutic to individuals with mental health issues. First, writing serves as a means to externalize a person's problems by objectifying them and putting them at a distance making the issues distinct from the individual (White & Epston, 1990). Additionally, writing is a recursive process; when a person writes something out, they tend to go back and read statements that they have already written, editing and reflecting them so that the whole of the composition makes sense. Murphy and Mitchell (1997) surmised that the act of returning back on one's writing is therapeutic in that it forces individuals to see contradictions in their story in a way that is not realized in f2f therapy. Writing also serves as a way to make individuals more aware of themselves because they are obligated to look at their problems head-on. Finally, posts on ISGs can act as a sort of record of an individual's progress. People can look back and see how they've changed and how they handled obstacles in the past. Additionally, members of ISGs can review the positive comments and support others have given them (Murphy & Mitchell, 1997).

Most studies of ISGs focus on members who actively participate; however, there is large proportion of users that simply observe, or "lurk." Indeed, one study reported an average of 45.5% lurkers in health-related ISGs (Nonnecke & Preece, 2000). Some of the reasons

individuals might lurk are privacy concerns, desire to "check out" the group before posting, or poor fit with group. Many lurkers indicate that they participate in the group only to receive information. Nonnecke et al. also investigated possible differences in attitudes between lurkers and posters. Results showed that lurkers were less positive with regard to their online support group than those who post. However, one study found that merely reading posts and not posting may be sufficient for many lurkers; van Uden-Kraan et al. (2008) revealed that participation in an online support group had the same positive effect on lurkers' feelings of being empowered as it did on active posters.

Limits of Online Mental Health Services

However, online mental health services may also have some limits; in particular, participants could be apprehensive about the lack of body language and nonverbal cues when interacting online (Haberstroh et al, 2007). One study found that another potential challenge was dealing with technical difficulties, which discouraged full participation (Haberstroh et al, 2007). Some people feel the need to experience the physical presence and sense of belonging that come with real in-person encounters (Davison, Pennebaker, Dickerson, 2000). Additionally, the online disinhibition effect may allow for something called "toxic disinhibition." For example, a person might find it easier to be rude and harshly critical on the internet than in real life (Suler, 2004). The manifestation of this in an online support group could negatively affect participants. Others might exploit ISGs by fabricating stories in order to garner attention, which may lead people to be weary of ISG post contents (Feldman, 2000).

There is controversy regarding the question of whether ISGs lead to further social isolation. These fears are based on a 1998 study which reported results from a longitudinal study

that followed 169 people for one to two years. The study described the "internet paradox," a paradox in which a social technology used for communication with others apparently increased social isolation and decreased mental health of its users. However, three years after the findings the research team revisited the study's population, who were by then more experienced with the internet, and found that higher internet use was associated with better mood and no association with loneliness was observed. The authors surmised that the negative findings from the first study phase might have been only a result of the novelty of the internet in the early days (Kraut et al., 1998).

Summary Statement

In summary, the following study will look at the efficacy of ISGs in reducing symptoms of anxiety disorders as compared to traditional f2f support groups. Although use of the internet for information and support is becoming increasingly popular, the efficacy of such a modality has received very little empirical attention. It's unknown if ISGs have the same kind of usefulness as traditional f2f support groups including for those managing anxiety related symptoms. Thus, this study seeks to look at the utility of ISGs in managing symptoms of anxiety and/or anxiety disorders, perceived presence of therapeutic factors within ISGs and f2f groups, possible demographic differences between users of ISG and f2f participants, and potential barriers to professional mental health treatment that some ISG members might experience.

Chapter 3: Methodology

Research Design

The research design was a retrospective cohort study utilizing surveying techniques. The survey consisted of questions relating to the participant's mental health status, reasons for avoiding professional treatment of their anxiety, frequency of their use of the support group, and their opinion of the group's helpfulness. The responses to questions were in multiple choice, short answer, and Likert scale format. The survey was designed in order to answer the following four research questions:

1. Are there characteristics that are related to an individual choosing to utilize an ISG over a f2f support group?
2. What barriers to formal treatment are identified by participants of internet support groups?
3. Do members of ISGs report that such groups are an effective tool?
4. How does participant time in group correlate with perceived usefulness?
5. What therapeutic factors are present in ISGs and f2f groups? Are there differences in such factors between the different modalities?

Questions were answered by means of an online survey, which was created using Qualtrics' web-based survey software.

Data Collection Procedure

Data collection began following approval of the study from The Ohio State University's Institutional Review Board. All data was collected through an online survey hosted by Qualtrics. The moderators of f2f support groups were e-mailed to inform them of the study and to ask if they would forward the e-mail to members of the support group. The email to f2f group moderators contained a link to the online survey. F2f group moderators were not asked to recruit participants. Please refer to appendix A to see the email sent to f2f group moderators. Internet support group moderators were asked for permission to post a message about the study on the support group website. Please refer to appendix B to see the message sent to ISG moderators. If moderators approved the study, a message containing a link to the survey was posted on the group's message board. Refer to appendix C for the message used to recruit ISG participants. One follow-up reminder email was sent to f2f group and ISG moderators who did not respond two weeks after the original email.

The survey was comprised of 43 questions and was estimated to take thirty to forty minutes to complete. Participants were able to withdraw from the survey at any time. The survey was untimed but participants were only permitted to complete the survey once. At the end of survey, participants had the option to submit their email addresses in order to be entered into a drawing for one of four $50 Amazon gift cards. The surveys used in the study can be seen in appendices C and D.

Sampling Procedure

The participants were adult members of either an internet support group (ISG) or traditional face-to-face (f2f) support group for individuals managing symptoms of anxiety and/or

identify as having an anxiety disorder. Children were excluded because anxiety disorders typically present differently in children than in adults, which could confound the interpretation of the data. Additionally, this study was principally interested in those participants who have actively sought out support group services to manage an anxiety disorder, which is typically done by adults.

Internet support groups were found with a Google search using the phrases "online" or "internet" along with "anxiety support group" or "anxiety forum." Additionally, different countries were sometimes included in the search to get more international results, i.e. "UK" or "Australia." To find diagnosis-specific ISGs, "anxiety" was replaced with names of different anxiety disorders, including "social anxiety," "OCD," "PTSD," "hoarding", and "panic disorders." In total, twenty-two ISG moderators were contacted; of those moderators, seven gave the researcher permission to post the study on the group's discussion forum, as illustrated in Table 1 (response rate of 31.8%).

TABLE 1. Internet Support Groups Included In Study

Name of Group	URL
Anxiety Forum	http://anxietyforum.net/
Anxiety Space	http://anxietyspace.com/
No More Panic	http://www.nomorepanic.co.uk/
Panic Attacks	http://jeff.websitetoolbox.com/
Psychforums	http://www.psychforums.com/
Social Phobia World	http://www.socialphobiaworld.com/
Stepping Out of Squalor	http://takeonestepatatime.proboards.com/

To find face-to-face groups, the Anxiety and Depression Association of America's (ADAA) and International OCD Foundation's databases of support groups were utilized. In addition to these two databases, Meetup.com was searched for anxiety disorder support groups; individual Meetup groups were contacted through messaging on the website. In total, 108 f2f

group moderators were contacted; of those group moderators, fifteen said they would pass along information to their members (response rate of 7.2%).

Measures

Basic demographics

Participants were asked to answer a series of basic demographic questions about themselves including age, country of residence, and diagnosis. Age and country of residence was chosen from a drop-down list while diagnosis was chosen from a menu that allowed participants to select multiple responses. Diagnoses corresponded with those defined by the DSM-IVR as briefly defined in Table 2. The DSM-IVR was used as this was still the version used at the onset and through the majority of the study. Additionally, participants were permitted to write in a diagnosis if it was not listed. Participants were also asked to specify the number of months that they had been active in their respective support group; the question was presented in an open-ended format in which survey-takers typed out their responses in a box.

TABLE 2. Anxiety Disorders According to DSM-IVR

Diagnosis	**Definition**
Generalized anxiety disorder	Excessive, uncontrollable and often irrational worry for >6 months
Panic disorder	Unexpected, recurrent panic attacks, followed in at least one instance by at least a month of a significant and related behavior change, a persistent concern of more attacks, or a worry about the attack's consequences
Agoraphobia	Anxiety in situations where the sufferer perceives certain environments as dangerous or uncomfortable
Specific phobia	Marked and persistent fear that is excessive or unreasonable, cued by the presence or anticipation of a specific object or situation
Social anxiety disorder	Intense fear in one or more social situations, causing considerable distress and impaired ability to function in at least some parts of daily life

Obsessive- compulsive disorder	Intrusive thinking that produce uneasiness, apprehension, fear, or worry; repetitive behavior aimed at reducing the associated anxiety; or a combination of such obsessions and compulsions
Posttraumatic stress disorder	A group of symptoms including disturbing recurring flashbacks, avoidance or numbing of memories, and hyperarousal following > 1 month after a traumatic event
Acute stress disorder	Development of severe anxiety, dissociative amnesia, and other symptoms that occurs within one month after exposure to an extreme traumatic stressor, with symptoms lasting <4 weeks

Barriers to treatment scale

Chartier-Otis et al. (2010) developed a scale (seen in Table 3) to evaluate unmet needs for anxiety treatment which consists of twelve statements incorporating five dimensions of perceived barriers to mental health services: cost, social attitudes, access, services, and loss of pay. These dimensions are based on a study conducted by Craske and colleagues (2005). Participants in this study were first asked if they had sought professional help for their anxiety symptoms; if they indicated that they had not sought professional help, they were directed to a question asking the survey-taker to indicate barriers that had prevented them from receiving professional help.

TABLE 3. Barriers to Treatment (Chartier-Otis et al. , 2010)

Cannot find out where to go for help
Worried about the cost
Health plan will not pay for treatment
Cannot get an appointment soon enough
Too embarrassed to discuss the problem with anyone
Cannot be helped
Problem is not severe enough
Provider will not accept health insurance
Cannot get through to the provider's office on the telephone
Fear of what others would think
Afraid to lose pay from time off work
Cannot get to the provider's office when it's open
Takes too long to get to the provider's office from house or work
Lack of public transportation
Lack of childcare

Zung Self-Rating Anxiety Scale (SAS)

Participants in this study were given the Zung Self-Rating Anxiety Scale (SAS) in order to evaluate their anxiety levels. The SAS is a 20-item self-report assessment developed to measure anxiety levels based on four dimensions: cognitive, autonomic, motor, and central nervous system symptoms. Individuals answering the question indicate how much each statement applies to him or her. Each question is scored on a Likert-type score ranging from 1 ("a little of the time") to 4 ("most of the time"). The total raw score ranges from 20-80; the raw score needs to be converted into an "Anxiety Index" score that ranges from "normal" anxiety to "extreme" anxiety. Refer to appendix F to see how anxiety index scores are calculated. Lower raw scores correspond with lower anxiety while higher scores correspond with higher anxiety (Zung, 1971). Please refer to Appendix D to see the version of the scale used in this study

Group Helpfulness Scale (GHS)

The researcher created their own scale to test helpfulness of the group. The measure consists of one item. Participants were asked to rate how strongly they agreed with the statement "the group has been helpful in the management of my anxiety disorder." The ratings were scored on a Likert scale from one to five. The scale was created for sake of brevity and because no comparable scales were known to the author.

Yalom's Therapeutic Factors (adapted)

Yalom (2005) outlined eleven therapeutic factors that he believed were necessary to initiate the processes of change and recovery among support group participants (illustrated in Table 4). Yalom developed a 60-item therapeutic factor Q-sort by writing five items that corresponded to each of the 11 factors. Those who took the questionnaire were asked to rate how

helpful each item was in their group. The Q-sort was adapted for this study; only one item was listed from each five item group and participants were asked for how present the factor was within the group rather than how helpful.

TABLE 4. Yalom's Therapeutic Factors

Factor	**Statement**
Universality	Being a member of a support group has helped me to understand that I'm not the only one with a problem.
Altruism	I provide help to other members of the support group.
Instillation of hope	I'm inspired when I see other members of the support group solve their problems.
Imparting of information/ Guidance	Other members of the support group provide me with advice.
Social skills development	I'm more trusting of other people due to my experience in the support group.
Interpersonal learning	Other group members tell me what they honestly think of me.
Cohesion	I feel accepted by other members of the support group.
Existential factors	The support group has helped me to realize that I am ultimately responsible for the way I live my life.
Catharsis	I feel as if I can say what is bothering me instead of holding it in in my support group.
Imitative behavior	I try to become more like the members of the support group that have been successful in solving their problems.
Corrective recapitulation of family of origin issues	The support group is similar to a family.

Data Analysis

The raw data was exported from Qualtrics to R software for statistical computing and the data was cleaned for missing responses. Measures of central tendency and frequency counts were used to describe the sample demographics, including age, location, diagnoses, and anxiety

level. To compare mean age of ISG and f2f group participants, a Welch two sample t-test was conducted; the Welch t-test was utilized due to the small sample size. To assess differences in groups regarding location, a Euclidean latitude and longitude average location t-test was conducted. The Kruskal-Wallis ANOVA was used to evaluate differences in total time in months spent in respective groups. Kruskal-Wallis was also utilized to compare overall helpfulness of group and presence of therapeutic factors. Analysis regarding presence of therapeutic factors was weighted by log time of time participated in the support group. The raw scores from the anxiety scale were converted into an anxiety index and the means were compared using the Welch two-sample t-test.

Chapter 4: Results

Sample

As previously noted, two groups of participants were recruited: thirty-two members of an ISG and thirty-five members of a traditional f2f support group with a total of sixty-seven participants. Thirty of the f2f and thirty of the ISG participants completed over 50% of the survey, with completion means of 72% and 79% respectively.

The mean age of the full sample was 38.46 years old and the age range was 20 to 60 years old. As seen in Table 5, the majority of participants were residents of the United States (59%, n=36); other countries represented in the sample included Australia (9.8 %, n=6), Canada (13.1%, n=8), the UK (13.1%, n=8), Ireland (1.6%, n=1), Saudi Arabia (1.6%, n=1), and New Zealand (1.6%, n=1). One hundred percent of participants believed that they had an anxiety disorder (n=61). As illustrated by Table 6, most of the participants reported a diagnosis of generalized anxiety disorder (71.6%, n=43); other anxiety disorders reported by participants included panic disorder (31.6%, n=19), social anxiety disorder (35.0%, n=21), agoraphobia (15%, n=9), obsessive-compulsive disorder (40.0%, n=24), hoarding(11.6%, n=7), body dysmorphic disorder (10%, n=6), posttraumatic stress disorder (36.7%, n=22), acute stress disorder (5.0%, n=3), adjustment disorder (1.7%, n=1), emetophobia (1.7%, n=1), and health anxiety (1.7%, n=1).

TABLE 5. Demographics by Group

	F2f[a]	ISG[b]
Location		
United States	19 (61%)	17 (57%)
Canada	4 (13%)	4 (13%)
United Kingdom	3 (10%)	5 (17%)
Australia	5 (16%)	1 (3%)

Ireland	0 (0%)	1 (3%)
Saudi Arabia	0 (0%)	1 (3%)
New Zealand	0 (0%)	1 (3%)
Diagnosis		
GAD	19 (63%)	24 (80%)
OCD	12 (40%)	12 (40%)
PTSD	10 (33%)	12 (40%)
SAD	14 (47%)	7 (23%)
PD	9 (30%)	10 (33%)
Agoraphobia	6 (20%)	3 (10%)
Hoarding	5 (17%)	2 (7%)
BDD	5 (17%)	1 (3%)
ASD	3 (10%)	0 (0%)
Emetophobia	0 (0%)	1 (3%)
Health Anxiety	0 (0%)	1 (3%)
Adjustment Disorder	1(3%)	0 (0%)
Age		
	35.97(SD=10.77)	40.94 (SD=12.92)
	18-65	20-60

a. F2F – Face to Face (in person) support group

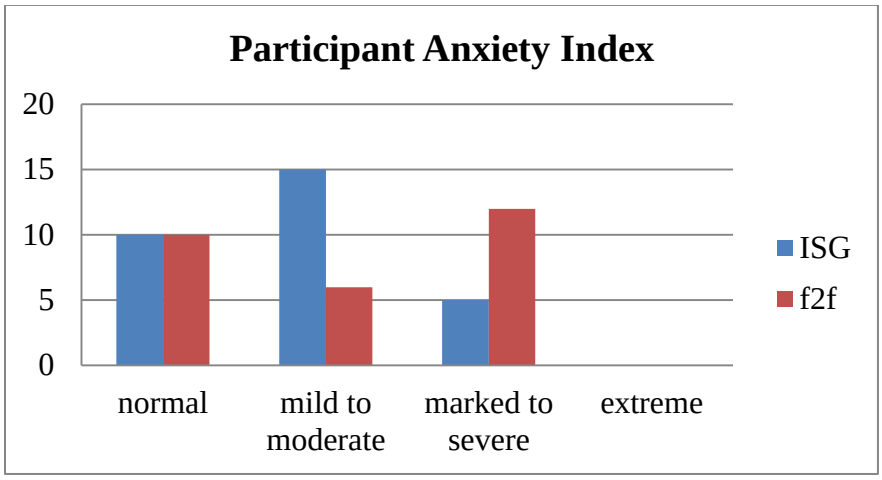
b. ISG – Internet Support Group

Research Q. 1: Are there characteristics that are related to an individual choosing to utilize an ISG over a f2f support group?

Responses to the Zung Self-Rating Anxiety Scale were converted to an anxiety index. The mean anxiety index of the internet support group was 51, which falls into the mild to moderate range, while the mean anxiety index of the f2f group was 56, which falls into the mild to moderate anxiety range as well. The range of anxiety index scores for ISG participants was 38 (normal) to 65 (marked to severe anxiety). The range of anxiety index scores for f2f participants was 39 (normal) to 74 (marked to severe anxiety). Figure 1 provides an overview of where participants from each group fell within the scale's ranges from normal to severe. A Welch two-sample t-test was conducted with an alpha level of .05. A significant difference was found between the f2f and ISG participants (p value=0.01091, df=43). In other words, F2f participants had significantly higher anxiety levels on average than ISG participants. Because there were

substantial time differences between lengths of time for involvement with group modality, time was treated as a control variable across the two groups. After time was controlled for, the results were essentially the same.

FIGURE 1. Participant Anxiety Index



It was expected that ISG participants would be more international than f2f participants, so location of participants was looked into and compared between groups. A majority of participants from both ISG and f2f groups were from the United States: nineteen (61%) of f2f and 17 (57%) of ISG participants were from the US. Location was estimated using IP addresses. A Kruskal-Wallis rank sum test was conducted to compare locations between f2f and ISG participants. No significant differences between groups regarding location were found (p value=1, df=1).

It was anticipated that the mean age of ISG participants would be lower than f2f participants, because of potential differences in internet usage and familiarity with online resources such as bulletin boards, for example. Thus the researchers compared age between the two groups. The mean age of ISG participants was 40.94 with a range of 18 to 65. The mean age of f2f participants was 35.97 with a range of 20 to 60. Mean ages of the groups (ISG and f2f)

were compared by conducting a Welch-two sample t-test. An alpha level of .05 was used with 50.8 degrees of freedom. No significant difference was found between the average age of groups (p value=.11).

Research Q.2: What barriers to formal treatment are identified by participants of internet support groups?

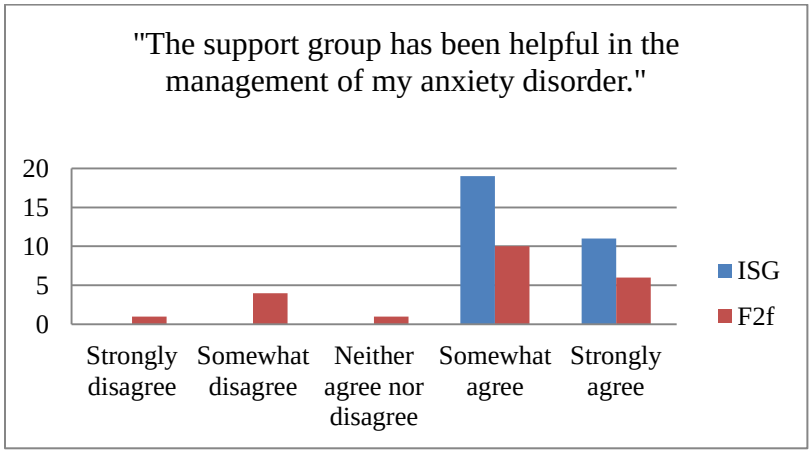
Very few of the participants reported barriers to formal treatment; most participants reported that they had sought professional treatment, therefore they weren't directed to the survey question regarding barriers. One (3%) of the participants from the ISG survey and four (13%) of the f2f participants reported that they had not sought professional treatment for their anxiety symptoms. Cost was the most frequent barrier reported; other barriers reported included not thinking the problem was severe enough and fear of what others would think.

Research Q.3: Do members of ISGs report that such groups are an effective tool?

As seen in Figure 2, the majority of ISG participants either somewhat agreed to strongly agreed to the statement, "The support group has been helpful in the management of my anxiety disorder." Nineteen (63%) of the participants somewhat agreed and eleven (37%) strongly agreed. None of the ISG participants somewhat or strongly disagreed with the statement. The ISG mean score for the statement was 4.37 (on a scale of one to five). Also seen on Figure 4, a majority of f2f participants strongly (n=6, 27%) or somewhat agreed (n=10, 45%) with the statement as well. The f2f mean score for the statement was 3.73 (on a scale of one to five). Kruskal- Wallis ANOVA was used to test differences between groups (alpha level=.05). No significant difference between the groups was found (df=1, p value=0.3173). The data was also

weighted by the log time of time participated in groups and no significant difference was found (p value=0.3173).

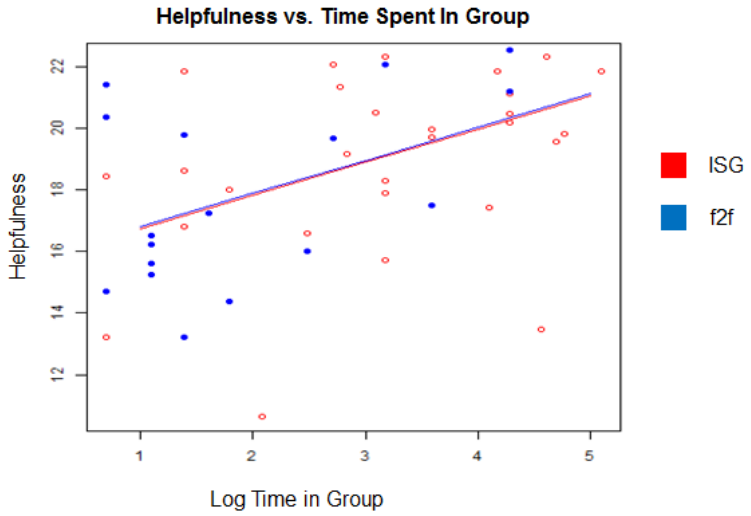
FIGURE 2. Perceived Helpfulness



Research Q.4: How does participant time in group correlate with perceived usefulness?

On average, ISG participants had spent 41.57 months (range=2-163 mo.) in their group while f2f participants had spent 13.48 months (range=1-72 mo.) in their group. A Welch two sample t-test was conducted (df=39.27) to assess differences in time (alpha level=.05). A significant difference between groups regarding time spent in group was found, with ISG participants spending a significantly longer amount of time in their group (p value=0.0007789). As seen in Figure 6, when perceived overall helpfulness was regressed over log time of time spent in groups, the regression lines were roughly equal. The longer ISG and f2f participants had participated in their groups, the more they tended to rate higher helpfulness of group.

FIGURE 3. Helpfulness vs. Time Spent in Group



Research Q.5: What therapeutic factors are present in ISGs and f2f groups? Are there differences in such factors between the different modalities?

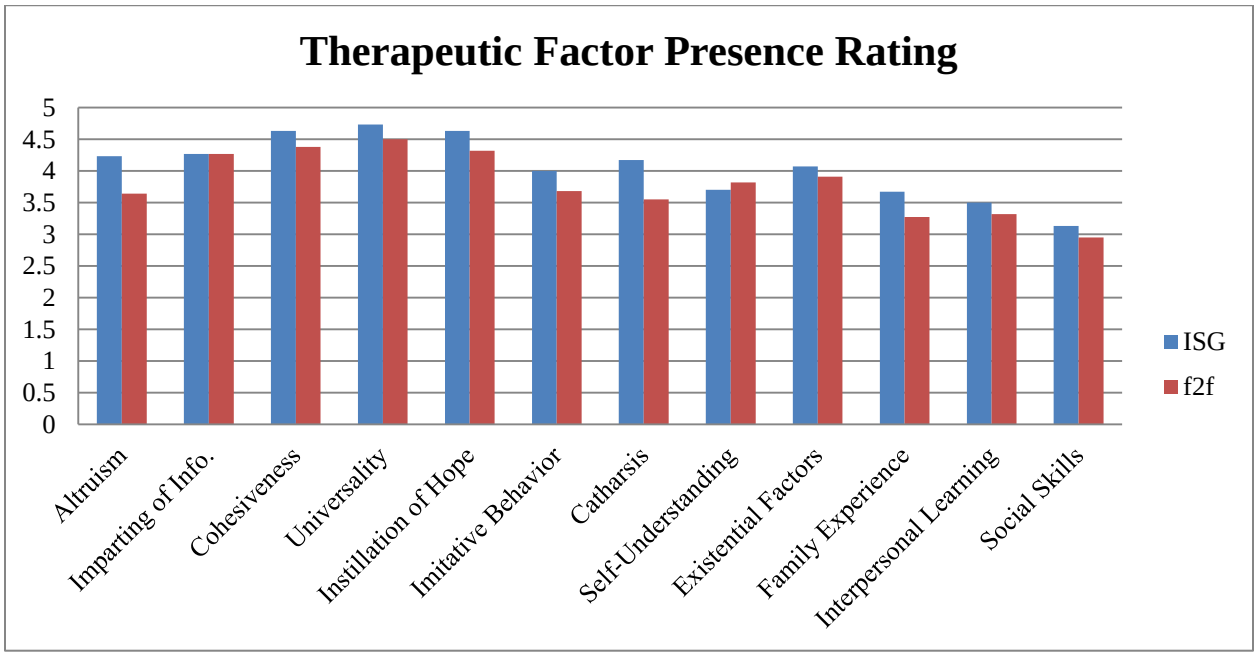
As seen in Table 6 and Figure 4, on the Yalom's Therapeutic Factors (adapted) (YTF-A) both groups rated the factor "universality" as being the most present and "social skill development" as the least present. "Universality" was given a mean score of 4.73 from ISG participants and 4.5 from f2f participants while "social skill development" was given a mean score of 3.13 from ISG participants and 2.93 from f2f participants (on a scale of one to five). All responses regarding therapeutic factors were pooled and compared between the two survey groups using Kruskal-Wallis ANOVA (α=.05, df=1). No significant differences regarding perceived therapeutic factors were found between groups (p value=1).

TABLE 6. Therapeutic Factors From Most to Least Present

ISG		**F2f**	
Factor	**$\bar{x}$**	**Factor**	**$\bar{x}$**
Universality	4.73	Universality	4.50
Cohesiveness	4.63	Cohesiveness	4.38
Instillation of Hope	4.63	Instillation of Hope	4.32
Imparting of Information	4.27	Imparting of Information	4.27
Altruism	4.23	Existential Factors	3.91

Catharsis	4.17	Self-Understanding	3.82
Existential Factors	4.07	Imitative Behavior	3.68
Imitative Behavior	4.00	Altruism	3.64
Self-Understanding	3.70	Catharsis	3.55
Family Experience	3.67	Interpersonal Learning	3.32
Interpersonal Learning	3.50	Family Experience	3.27
Social Skill Development	3.13	Social Skill Development	2.95

FIGURE 4. Therapeutic Factor Presence Rating



Chapter 4: Discussion

In increasing numbers, individuals are turning to the internet for mental health support. Despite this, research is limited on internet support groups (ISGs) related to mental health. This study looked at the utility of ISGs in managing symptoms of anxiety and/or anxiety disorders, possible demographic differences between users of ISG and f2f participants, potential barriers to professional mental health treatment that some ISG members might experience, and the reported effectiveness of ISGs compared to f2fs.

Results indicate that internet support groups (ISGs) are seen as a helpful resource and potential alternative to traditional face-to-face (f2f) groups for people who report having anxiety problems. Modalities appear to be similarly effective; ISG and f2f participants rated their groups equally as helpful in the management of their anxiety disorder and symptoms. All twelve therapeutic factors had a strong presence in both modalities, and participant groups rated perceived therapeutic factors similarly.

The study proposed that ISG participants would be both younger and more international than F2f participants, but the groups were statistically similar across these demographic variables, suggesting that ISG participants are apparently not that different from those who use traditional forms of support such as f2f groups. Time spent in the group appeared to be an important factor regarding the perceived effectiveness in both groups; that is, when f2f and ISG participants spent more time in the group, the more helpful they found the group to be overall. Nonetheless, there was a significant difference in time spent in group between ISG and f2f participants. This is likely due to the fact that f2f groups often end after a set amount of weeks. Additionally, ISGs tend to be more convenient and lower-cost than f2f groups, which may lead to higher retention rates.

This study hypothesized that more symptomatic individuals might prefer ISGs over traditional f2f support groups due to barriers to treatment, cost, and less anonymity. Nonetheless, this study demonstrated that at least for these ISG participants, few to any barriers were reported, suggesting that the ISG was either used as a supplement to f2f therapy or chosen over f2f support groups. In fact, this study found the opposite of what it hypothesized: f2f participants tended to have higher anxiety levels. This suggests that people with more symptoms used traditional f2f support groups suggesting the continued need and usefulness of f2f groups.

Implications

The findings in this study have implications for mental health professionals that work with individuals with anxiety. Mental health professionals should be aware that ISGs appear to be a helpful resource for those managing anxiety symptoms. Although f2f participants exhibited higher anxiety levels, there was no difference in groups regarding therapeutic factors. An ISG might be useful for a f2f group client once symptoms become milder or f2f group has finished. Mental health professionals may refer clients to ISGs to supplement f2f therapy, especially considering the 24/7 access and convenience of ISGs. Certainly, as part of an assessment, mental health professionals could inquire to see if their clients use or are familiar with ISGs. Mental health professionals might find helpful lists of high quality ISGs as a potential additional resource for their clients. Finally, in the future, ISGs could possibly benefit from the presence of mental health professionals both in the development and facilitation in at least some ISGs.

Limitations

This study is exploratory in nature, so conclusions are tentative. Self-selection bias was a possible issue; it's possible that the sample consisted of only those most active, interested and/or

less symptomatic in ISG and f2f groups, which may have skewed the data in favor of more positive responses and/or lack of differences across groups. Attrition was also a small problem; seven (10%) of the sixty-seven total participants dropped out less than halfway through the survey. Most of the ISG participants had sought professional help in addition to participating in the ISG, so effect of the ISG as solely responsible for what ISGs reported may be limited. The study was self-report and cross-sectional so it is difficult to establish causality between variables. Additionally, the same size is small and thus generalizability is limited at best.

Conclusion & Future Research Recommendations

Despite a number of limitations, this is an exploratory study that is, to this author's awareness, a first of its kind: it attempted to test whether individuals who identify as having anxiety disorders report differences in perceived helpfulness between internet support groups (ISGs) and traditional face-to-face support group (f2f). The results of this study can help to improve access to mental health support for people with anxiety disorders as it demonstrates that ISGs can be an resource, including as a possible adjunct to more traditional mental health services. In addition, future research should conduct longitudinal studies to test and track the progress of individuals in ISGs and f2f while also testing for any differences in anxiety levels and responsiveness between support group modalities as was found in this study.

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Appendix A: Email to Moderators of F2f Support Groups

Hello,

My name is Emily Deis and I'm a social work student at The Ohio State University. I am currently researching the utility of internet support groups in managing anxiety disorders, differences between internet and face to face support group members, and barriers to professional treatment of anxiety disorders.

As part of my research, I will be conducting an online survey. The survey will take approximately thirty to forty minutes to complete. I am asking some very sensitive and personal questions, including questions regarding age, mental health, and support group use. Participation is voluntary. If a participant desires to leave the survey, they may do so at any time.

Individuals will be asked to electronically sign a consent form before they complete the survey and all answers will be kept anonymous. Participants must be over the age of 18 and be a member of an anxiety disorder support group. If you know of any support group members who might be interested in participating, please feel free to forward this email or provide them with my e-mail address or with a link to the survey: (link to survey).

Additionally, if someone so chooses to, they can enter into a raffle to win one of four $50 Amazon gift cards as a way of providing some compensation for their time.

Thank you for your consideration in this matter. It is much appreciated.

Emily Deis

Deis.17@osu.edu

Appendix B: Message to Moderators of ISGs

Hello,

My name is Emily Deis and I'm a social work student at The Ohio State University. I am currently researching the utility of internet support groups in managing anxiety disorders, differences between internet and face to face support group members, and barriers to professional treatment of anxiety disorders.

As part of my research, I am conducting an online survey. One of the groups I'm interested in surveying are users of an anxiety disorder internet support group. In addition to the survey, I will also be conducting an informal qualitative analysis of an internet support group. I will be coding threads for the presence of therapeutic factors.

I am contacting you to ask for your permission to post information about the online survey and request the participation of members on your support group's message board. I am also contacting you to ask for you permission to conduct a qualitative analysis of your internet support group.

Before they complete the survey, individuals will be asked to electronically sign a consent form and all answers will be kept anonymous. Participants must be over the age of 18 and be a member of an anxiety disorder support group.

The survey will take approximately thirty to forty minutes to complete. I am asking some very sensitive and personal questions, including questions regarding age, mental health, and support group use. If a participant feels the need or desire to leave the survey, they may do so.

No identifying information (such as username or location) will be collected about users of your internet support group while conducting the qualitative analysis. The threads of the board will simply be coded on a scale for the positive or negative presence of therapeutic factors.

Thank you for your consideration in this matter. It is much appreciated.

Emily Deis

Deis.17@ osu.edu

Appendix C: ISG Recruitment Post

Hello,

I'm a social work student at The Ohio State University. I'm currently conducting undergraduate research on the usefulness of internet support groups in managing anxiety disorders. To aid in my research, I'm seeking adult members of support groups to complete an online survey about their experiences. Participants will be entered into a raffle to win either one of four $50 Amazon gift cards. Participants will be asked to electronically sign a consent form before they complete the survey and all answers will be anonymous and kept confidential to the best of my ability. The survey will take approximately thirty to forty minutes to complete and will include questions about age and mental health status. If you're interested in participating, the link to the survey is: (link to survey)

Thank you for your consideration.

Appendix D: Survey Instrument for ISGs

1. What is your age? ____

(If participant is under the age of 18 they will be taken to a page that explains the study is only looking for participants 18 and over and will thank them for their time and interest.)

2. What country are you currently a resident of?
(Drop down list of countries)

3. Do you believe that you have an anxiety disorder?

- o Yes
- o No

4. (If yes to three) which anxiety disorder(s) do you believe that you have? Check all that apply.

- o Generalized Anxiety Disorder
- o Panic Disorder
- o Social Anxiety Disorder
- o Agoraphobia
- o Obsessive-Compulsive Disorder
- o Hoarding
- o Body Dysmorphic Disorder
- o Post-Traumatic Stress Disorder
- o Acute Stress Disorder
- o Other: (please specify)_____

Barriers to treatment: Despite the documented effectiveness of therapy, very few individuals who suffer from an anxiety disorder seek treatment. Barriers to treatment may be psychological, social, and/or economic, including cost, time commitment, inaccessibility of services, and fear of stigmatization. Understanding the barriers to formal treatment that individuals with anxiety disorders may face could help to structure appropriate outreach programs.

5. (If yes to three) Have you sought professional treatment for your anxiety disorder(s)?
- o Yes
- o No

6. (If no to five) What is the reason you haven't sought professional treatment for your anxiety disorder(s)? Check all that apply.

- o You cannot find out where to go for help
- o You are worried about the cost
- o Your health plan will not pay for treatment
- o You cannot get an appointment soon enough
- o You are embarrassed to discuss the problem with anyone
- o You do not think that you can be helped
- o You do not think your problem is severe enough
- o The provider will not accept your health insurance
- o You cannot get through to the provider's office on the telephone
- o You are afraid of what others would think
- o You are afraid you will lose pay from work
- o You cannot get to the provider's office when it was open
- o It takes too long to get to the provider's office from your house or work
- o There is a lack of public transportation
- o You need someone to take care of your children
- o I don't have any barriers
- o Other reason: (please specify)_____

7. On a scale of one to five, how much have these barriers limited you?

1	2	3	4	5
Not at all		Somewhat		Very much

8. About how long have you been a member of the anxiety internet support group (in months)? _____

About how many times have you posted on the internet support group? ____

INSTRUCTIONS: Please rate how strongly you agree or disagree about the following statements in relation to the anxiety internet support group that you're a member of.

	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
1. The support group has been helpful in the management of my anxiety disorder.					

2. The support group has been helpful in reducing the symptoms of my anxiety disorder.					
3. I provide help to other members of the support group.					
4. Other members of the support group provide me with advice.					
5. I feel accepted by other members of the support group.					
6. Being a member of the support group has helped me to realize that I'm not the only one with a problem.					
7. I'm inspired when I see other members of the support group solve their problems.					
8. I try to become more like the members of the support group that have been successful in solving their problems.					
9. I feel as if I can what is bothering me instead of holding it in in my support group.					
10. The support group has helped me to discover and accept previously unknown or unaccepted parts of myself.					

11. The support group has helped me to realize that I am ultimately responsible for the way I live my life.					
12. The support group is similar to a family.					
13. Other group members tell me what they honestly think of me.					
14. I'm more trusting of other people due to my experience in the support group.					

Listed below are 20 statements. Please read each one carefully and decide how much the statement describes how you have been feeling during the past week. Select the appropriate number for each statement.				
	None or a little of the time	Some of the time	Good part of the time	Most or all of the time
1. I feel more nervous and anxious than usual.	1	2	3	4
2. I feel afraid for no reason at all.	1	2	3	4
3. I get upset easily or feel panicky.	1	2	3	4
4. I feel like I'm falling apart and going to pieces.	1	2	3	4
5. I feel that everything is alright and nothing bad will happen.	4	3	2	1
6. My arms and legs shake and tremble.	1	2	3	4
7. I am bothered by headaches, neck, and back pains.	1	2	3	4

8. I feel weak and get tired easily.	1	2	3	4
9. I feel calm and can sit still easily.	4	3	2	1
10. I can feel my heart beating fast.	1	2	3	4
11. I am bothered by dizzy spells.	1	2	3	4
12. I have fainting spells or feel faint.	1	2	3	4
13. I can breathe in and out easily.	4	3	2	1
14. I get feelings of numbness and tingling in my fingers and toes.	1	2	3	4
15. I am bothered by stomachaches or indigestion.	1	2	3	4
16. I have to empty my bladder often.	1	2	3	4
17. My hands are usually dry and warm.	4	3	2	1
18. My face gets hot and blushes.	1	2	3	4
19. I fall asleep easily and get a good night's rest.	4	3	2	1
20. I have nightmares.	1	2	3	4

Appendix E: Survey Instrument for F2f Groups

1. What is your age? ____

(If participant is under the age of 18 they will be taken to a page that explains the study is only looking for participants 18 and over and will thank them for their time and interest.)

2. Do you believe that you have an anxiety disorder?

- o Yes
- o No

3. (If yes to two) which anxiety disorder(s) do you believe that you have? Check all that apply.

- o Generalized Anxiety Disorder
- o Panic Disorder
- o Social Anxiety Disorder
- o Obsessive-Compulsive Disorder
- o Post-Traumatic Stress Disorder
- o Phobia : (please specify)_____
- o Other: (please specify)_____

4. Is the support group you attend led by a professional?

- o Yes
- o No

Barriers to treatment: Despite the documented effectiveness of therapy, very few individuals who suffer from an anxiety disorder seek treatment. Barriers to treatment may be psychological, social, and/or economic, including cost, time commitment, inaccessibility of services, and fear of stigmatization. Understanding the barriers to formal treatment that individuals with anxiety disorders may face could help to structure appropriate outreach programs.

5. (If yes to three) Have you sought professional treatment for your anxiety disorder(s)?

- o Yes
- o No

6. (If no to five) What is the reason you haven't sought professional treatment for your anxiety disorder(s)? Check all that apply.

- o You cannot find out where to go for help
- o You are worried about the cost
- o Your health plan will not pay for treatment
- o You cannot get an appointment soon enough
- o You are embarrassed to discuss the problem with anyone
- o You do not think that you can be helped
- o You do not think your problem is severe enough
- o The provider will not accept your health insurance
- o You cannot get through to the provider's office on the telephone
- o You are afraid of what others would think
- o You are afraid you will lose pay from work
- o You cannot get to the provider's office when it was open
- o It takes too long to get to the provider's office from your house or work
- o There is a lack of public transportation
- o You need someone to take care of your children
- o I don't have any barriers
- o Other reason: (please specify)_____

7. On a scale of one to five, how much have these barriers limited you?

1	2	3	4	5

8. About how long have you been a member of the support group (in months)? _____

9. About what percentage of meetings have you attended since becoming a member of the support group?

- o Between 0% and 25% of the meetings
- o Between 25% and 50% of the meetings
- o Between 50% and 75% of the meetings
- o Between 75% and 100% of the meetings

INSTRUCTIONS: Please rate how strongly you agree or disagree about the following statements in relation to the anxiety support group that you're a member of.					
	Strongly Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Strongly Agree
1. The support group has been helpful in the management of my anxiety disorder.					
2. The support group has been helpful in reducing the symptoms of my anxiety disorder.					
3. I provide help to other members of the support group.					
4. Other members of the support group provide me with advice.					
5. I feel accepted by other members of the support group.					
6. Being a member of the support group has helped me to realize that I'm not the only one with a problem.					
7. I'm inspired when I see other members of the support group solve their problems.					
8. I try to become more like the members of the support group that have been successful in solving their problems.					

9. I feel as if I can say what is bothering me instead of holding it in within the support group.					
10. The support group has helped me to discover and accept previously unknown or unaccepted parts of myself.					
11. The support group has helped me to realize that I am ultimately responsible for the way I live my life.					
12. The support group is similar to a family.					
13. Other group members tell me what they honestly think of me.					
14. I'm more trusting of other people due to my experience in the support group.					

Listed below are 20 statements. Please read each one carefully and decide how much the statement describes how you have been feeling during the past week. Select the appropriate number for each statement.				
	None or a little of the time	Some of the time	Good part of the time	Most or all of the time
1. I feel more nervous and anxious than usual.	1	2	3	4
2. I feel afraid for no reason at all.	1	2	3	4
3. I get upset easily or feel panicky.	1	2	3	4
4. I feel like I'm falling apart and going to pieces.	1	2	3	4
5. I feel that everything is alright and nothing bad will happen.	4	3	2	1
6. My arms and legs shake and tremble.	1	2	3	4
7. I am bothered by headaches, neck, and back pains.	1	2	3	4
8. I feel weak and get tired easily.	1	2	3	4
9. I feel calm and can sit still easily.	4	3	2	1
10. I can feel my heart beating fast.	1	2	3	4
11. I am bothered by dizzy spells.	1	2	3	4
12. I have fainting spells or feel faint.	1	2	3	4
13. I can breathe in and out easily.	4	3	2	1
14. I get feelings of numbness and tingling in my fingers and toes.	1	2	3	4
15. I am bothered by stomachaches or indigestion.	1	2	3	4
16. I have to empty	1	2	3	4

my bladder often.				
17. My hands are usually dry and warm.	4	3	2	1
18. My face gets hot and blushes.	1	2	3	4
19. I fall asleep easily and get a good night's rest.	4	3	2	1
20. I have nightmares.	1	2	3	4

Appendix F: Converting Raw Score to Anxiety Index

Converting Raw Score Total to Anxiety Index

RAW SCORE	ANXIETY INDEX	RAW SCORE	ANXIETY INDEX	RAW SCORE	ANXIETY INDEX
20	25	40	50	60	75
21	26	41	51	61	76
22	28	42	53	62	78
23	29	43	54	63	79
24	30	44	55	64	80
25	31	45	56	65	81
26	33	46	58	66	83
27	34	47	59	67	84
28	35	48	60	68	85
29	36	49	61	69	86
30	38	50	63	70	88
31	39	51	64	71	89
32	40	52	65	72	90
33	41	53	66	73	91
34	43	54	68	74	92
35	44	55	69	75	94
36	45	56	70	76	95
37	46	57	71	77	96
38	48	58	73	78	98
39	49	59	74	79	99
				80	100

Raw Score Total ☐ **Anxiety Index** ☐

Interpreting the Anxiety Index

Anxiety Index	Clinical Interpretation
Below 45	Within normal range
45 – 59	Minimal to moderate anxiety
60 – 74	Marked to severe anxiety
75 and over	Most extreme anxiety

- **Check that all statements have been answered**
- **Scoring values are printed next to the response**
- **Add up the Raw Total Score**
- **Convert the Raw Total to the Anxiety Index**